THALES

Thales payShield provides core protection for kashing's payment solutions

London-based Kashing Ltd. offers small merchants a broad range of digital payment services that previously have only been available to mid- and large-scale businesses. Established to empower small independent companies, Kashing's solutions provide options for online, face-to-face, and mobile payment transactions.

With its omnichannel portfolio, Kashing presents a uniform way to accept and manage payments, removing the barriers traditionally found with banks and other finance companies.

Business challenge

As a relative newcomer to the massive financial services marketplace, Kashing is heavily focused on establishing a robust foundation for its rapidly expanding business. Gert Horne, chief security officer and Kashing co-founder, observed, "Security is at the very core of our business: Just about everything we do revolves around ensuring the ongoing integrity of the data we hold."

He continued, "Our commitment to protecting sensitive data goes much deeper than just attaining compliance but being certified is certainly tangible, objective proof that we are serious about security."

Kashing's business objectives for growth dictated the need for an architecture capable of scaling to support expanding transaction volumes, accompanied by requirements for highavailability and elevated throughput capabilities.

Technical challenge

To safeguard the integrity of each transaction, Kashing created an architecture that utilizes point-to-point encryption of all sensitive information. The payer, payee and all transaction details remain protected from the original point-of-sale (POS) through to back-end processing. Hein de Kock, a senior developer for Kashing, elaborated, "We needed to identify a solution that could handle encryption of all our data in motion but additionally, in order to provide comprehensive coverage across our entire infrastructure, we also wanted to protect the static data that we hold."

The small, and even micro-sized businesses targeted by Kashing are frequently run by entrepreneurs with minimal technical knowledge. "We're all about ease-of-use and bringing simplicity to what is already an overly complicated world, so whatever encryption methods we selected must be completely transparent to our users," noted de Kock.

Neil Osborne, digital marketing account executive at Kashing, concurred, "Our approach is that we are 'Secure by Default' – we really don't want our clients to have to become security experts. Our subscribers are like family to us and by identifying best-in-class solutions we're able to ensure that all personal information is secure."

KASHING

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" From many perspectives – especially any involving integrity, availability, scalability and quality of service – Thales inspires me in the design and creation of our own environment."

– Gert Horne, chief security officer and co-founder, Kashing Ltd.

Solution

Kashing selected the Thales payShield 9000 HSM to facilitate transaction encryption and remote key injection into the company's POS card reader which is used typically by their small merchant customers to accept face-to-face card payments in conjunction with the Kashing app on their smartphone or tablet. "Throughout our evaluation period we were continually impressed by the HSM's performance and the excellent technical support we received, especially the Thales team's willingness to work with us to accomplish our goals," noted Horne.

He added, "We were given access to a virtual device that allowed us to accurately simulate the operational scenarios that we were planning and to begin development before having our physical device. This really confirmed that payShield is the right choice for us."

Result

Originally focused on encrypting transaction-related traffic, the broad capabilities of the Thales HSM creates an expanded role in the Kashing architecture: "It transpired that payShield is a great fit for encrypting our static data," observed de Kock. "We're able to apply all of the benefits of the HSM to our archived records too."

Horne commented, "Thales has been extremely instrumental in Kashing attaining PCI DSS compliance: The ability to perform end-to-end encryption and key management across all inmotion and at-rest data addresses significant components of the standard. In fact, we're one of only a handful of companies that are a payments company and designated by PCI as a qualified security assessor [QSA]."

The Kashing team includes a number of members located outside of its London headquarters, placing emphasis on the ability to remotely manipulate code and perform administration tasks. "We need to have hands-on control of the devices from anywhere, and Thales has done a fantastic job in the hardware design," stated de Kock. "The flexibility to log into payShield from my laptop at home and make changes to the HSM is just amazing."

Horne summarized, "I've had in-depth exposure to payShield – the way it's designed, the layout, the construction, the way that it operates, and it's a natural choice for Kashing. From many perspectives – especially any involving integrity, availability, scalability and quality of service – Thales inspires me in the design and creation of our own environment.

"I strongly recommend Thales."

Business Need:

- Implement robust security that didn't impede growth objectives
- Attain PCI-DSS compliance

Technology Need:

- Encrypt data in motion and at rest
- Remote management capabilities
- Ensure protection doesn't place additional complexity on end-users

Solution:

- Thales payShield 9000 hardware security module

Result:

- World-class encryption implementation capable of supporting aggressive growth targets
- Full PCI-DSS compliance across entire infrastructure
- Comprehensive remote administration and development capabilities
- Transparent security for all users

About Thales

The people you rely on to protect your privacy rely on Thales to protect their data. When it comes to data security, organizations are faced with an increasing number of decisive moments. Whether the moment is building an encryption strategy, moving to the cloud, or meeting compliance mandates, you can rely on Thales to secure your digital transformation.

Decisive technology for decisive moments.